# INSIGHT INTO DIALYSIS CARE QUALITY 2005 A CAHPS® IN-CENTER HEMODIALYSIS SURVEY OF PATIENTS









This guide presents information about the experiences of Medicare beneficiaries on hemodialysis at ABC Dialysis Center. You can use this guide to better understand ABC Dialysis Center's strengths and weaknesses and help you develop strategies to improve performance and provide even better care.





# Acknowledgments This guide, developed by the American Institutes for Research® (AIR), was sponsored by the Agency for Healthcare Research and Quality's (AHRQ) CAHPS program. This guide represents contributions from the CAHPS Consortium, including representatives from RAND and Harvard as well as thoughtful input from AHRQ and the Centers for Medicare & Medicaid Services (CMS) project officers. Finally, we received helpful information from various representatives at several Networks and received information from multiple dialysis centers to improve this guide. Right-most dialysis photograph on cover used with permission from GAMBRO<sup>®</sup>.

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### **OVERVIEW**



This guide presents findings from the AHRQ's CAHPS In-Center Hemodialysis survey of dialysis patients sponsored by the Centers for Medicare & Medicaid Services (CMS). You can use this guide to examine areas where your dialysis center is doing well and others that may need improvement. The survey asked patients from your center about their experiences with care in the past 3 months. At ABC Dialysis Center, 62 out of 128 patients responded to the survey, for a response rate of 48.4%. For more information on survey development and analytic methods, see page 22. The survey focuses on 3 topics and has 40 questions regarding: **nephrologists' communication and caring, quality of dialysis center care and operations,** and **providing information to patients.** This guide presents the results of the survey including the 3 ratings, the 3 summary measures, 40 individual questions, and respondent characteristics. Patients from a total of 32 dialysis centers were asked to complete the survey. A copy of the entire survey is available in the appendix of this report.

For example, within the summary measure "Quality of Dialysis Center Care and Operations" the survey asks:

- **Question 12.** *In the last 3 months, how often did dialysis center staff explain things in a way that was easy to understand?* Never, Sometimes, Usually, or Always.
- **Question 16.** *In the last 3 months, how often did dialysis center staff make you as comfortable as possible during dialysis?* Never, Sometimes, Usually, or Always.

### **HIGHLIGHTS**

**ABC Dialysis Center is on the right track** compared to the national average on:

- Quality of Dialysis Center Care and Operations (See pages 2 and 8)
- Providing information to patients (See pages 2 and 17)

**ABC Dialysis Center could improve** compared to the national average on:

■ Nephrologists' Communication and Caring (See pages 2 and 4)

**SUMMARY MEASURES**. These summary measures are based on the summed average of responses to each of the items corresponding to a particular topic. They are represented by a score ranging from 0 to 100.

#### Nephrologists' Communication and Caring

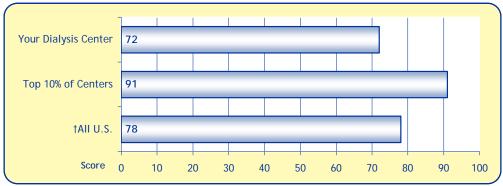
Your center can improve compared to the national average. This summary measure is the combined score of patient responses to 7 questions. The questions relate to listening, explaining, coordinating care, showing respect, spending enough time, showing care for the patient, as well as informing a patient about his or her condition. ABC Dialysis Center's score was 6% lower compared to the national average and 19% lower compared to the average of the top 10% of dialysis centers.

#### **Quality of Dialysis Center Care and Operations**

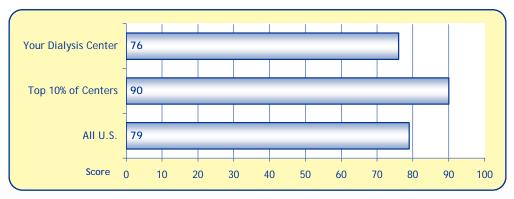
Your center is on the right track compared to the national average. This summary measure is the combined score of patient responses to 22 questions. The questions relate to dialysis center staff communication and caring, dialysis center staff professionalism and competence, and dialysis center operations. ABC Dialysis Center's score was 3% lower compared to the national average and 14% lower compared to the average of the top 10% of dialysis centers.

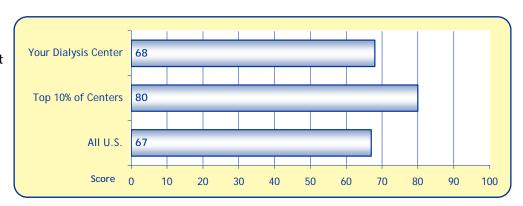
### **Providing Information to Patients**

Your center is on the right track compared to the national average. This summary measure is the combined score of patient responses to 11 questions. The questions relate to patients' knowledge about their condition and care, patient rights, and shared decision-making. ABC Dialysis Center's score was 1% higher compared to the national average and 12% lower compared to the average of the top 10% of dialysis centers.



† = This score is significantly higher than your dialysis center's score.





### **RATINGS.** Ratings range from 0 to 10 and refer to the nephrologists, the dialysis staff, and the dialysis center.

#### **Distribution of Ratings of Nephrologists**

Your center is on the right track compared to the national average. Patients were asked, "using any number from 0 to 10, where 0 is the worst kidney doctors possible and 10 is the best kidney doctors possible, what number would you use to rate the kidney doctors you have now?" The proportion of patients at ABC Dialysis Center who rated the center anywhere between 0 and 6 was 5% higher compared to the national average and 18% higher compared to the average of the top 10% of dialysis centers.

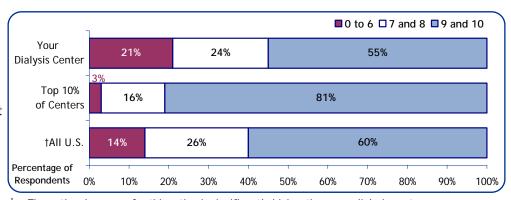
### Distribution of Ratings of Dialysis Center Staff Your center can improve compared to the national average.

Patients were asked, "using any number from 0 to 10, where 0 is the worst dialysis center staff possible and 10 is the best dialysis center staff possible, what number would you use to rate the dialysis center staff you have now?" The proportion of patients at ABC Dialysis Center who rated the center anywhere between 0 and 6 was 7% higher compared to the national average and 18% higher compared to the average of the top 10% of dialysis centers.

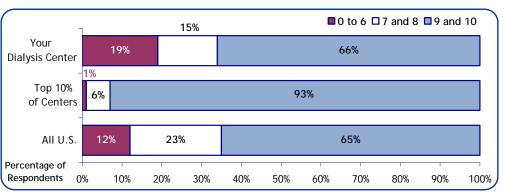
### Distribution of Ratings of Dialysis Centers

Your center is on the right track compared to the national average. Patients were asked, "using any number from 0 to 10, where 0 is the worst dialysis center possible and 10 is the best dialysis center possible, what number would you use to rate this dialysis center?" The proportion of patients at ABC Dialysis Center who rated the center anywhere between 0 and 6 was 7% higher compared to the national average and 18% higher compared to the average of the top 10% of dialysis centers.





 $^{\dagger}$  = The national average for this rating is significantly higher than your dialysis center's.



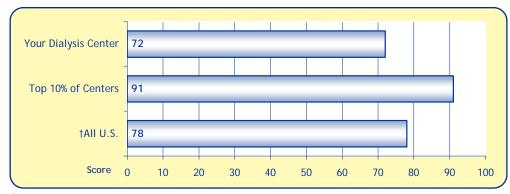
## NEPHROLOGISTS' COMMUNICATION AND CARING



This section presents patient responses to questions relating to their nephrologists' communication and caring. It begins with an overall summary measure. The summary measure is an average of the responses to the individual questions. The responses to these individual questions are presented following the summary measure.

#### **Summary Measure**

This summary measure is the combined score of patient responses to 7 questions. The questions relate to listening, explaining, coordinating care, showing respect, spending enough time, showing care for the patient, and informing a patient about his or her condition.



<sup>&</sup>lt;sup>†</sup> = This score is significantly higher than your dialysis center's score.

### How Often Nephrologists Listened Carefully to Patients

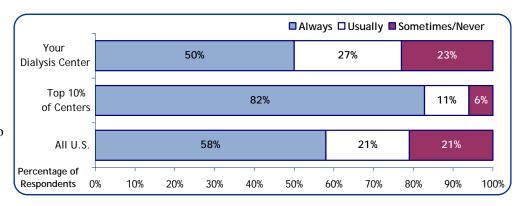
Your center is on the right track compared to the national average. Patients were asked, "how often did your kidney doctors listen carefully to you?" The proportion of patients at ABC Dialysis Center who said "always" was 8% lower compared to the national average and 32% lower compared to the average of the top 10% of dialysis centers.

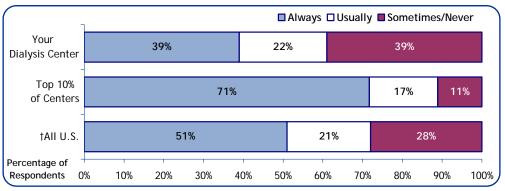
#### How Often Nephrologists Explained Things in a Way That Was Easy for Patients to Understand

Your center can improve compared to the national average. Patients were asked, "how often did your kidney doctor explain things in a way that was easy to understand?" The proportion of patients at ABC Dialysis Center who said "always" was 12% lower compared to the national average and 32% lower compared to the average of the top 10% of dialysis centers.

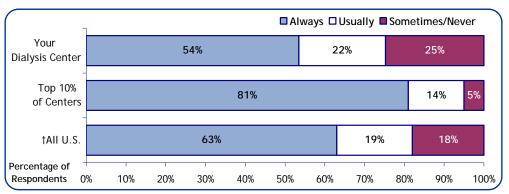
### How Often Nephrologists Showed Respect for What Patients Had to Say

Your center can improve compared to the national average. Patients were asked, "how often did your kidney doctors show respect for what you had to say?" The proportion of patients at ABC Dialysis Center who said "always" was 9% lower compared to the national average and 27% lower compared to the average of the top 10% of dialysis centers.





† = The national average for this score is significantly higher than your dialysis center's.



<sup>† =</sup> The national average for this score is significantly higher than your dialysis center's.

### How Often Nephrologists Spent Enough Time With Patients

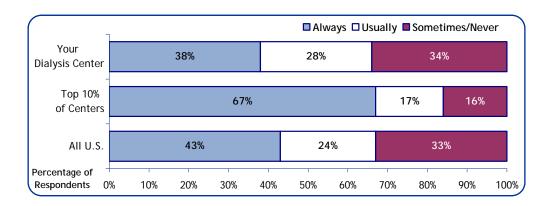
Your center is on the right track compared to the national average. Patients were asked, "how often did your kidney doctors spend enough time with you?" The proportion of patients at ABC Dialysis Center who said "always" was 5% lower compared to the national average and 29% lower compared to the average of the top 10% of dialysis centers.

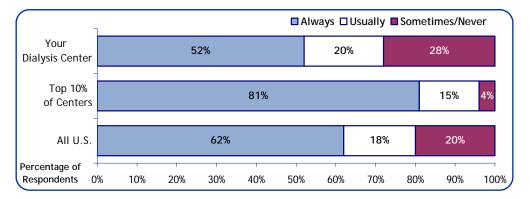
### How Often Nephrologists Cared About Patients as People

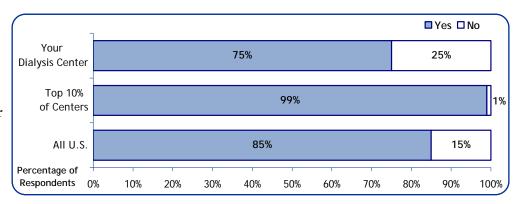
Your center is on the right track compared to the national average. Patients were asked, "how often did you feel your kidney doctors really cared about you as a person?" The proportion of patients at ABC Dialysis Center who said "always" was 10% lower compared to the national average and 29% lower compared to the average of the top 10% of dialysis centers.

### Whether Nephrologists Kept Patients Informed and Up-to-Date About Their Condition

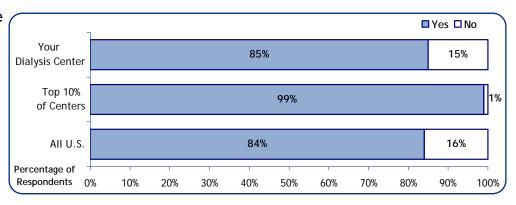
Your center is on the right track compared to the national average. Patients were asked, "how often did your kidney doctors keep you informed and up-to-date about your condition?" The proportion of patients at ABC Dialysis Center who said "yes" was 10% lower compared to the national average and 24% lower compared to the average of the top 10% of dialysis centers.







Whether Nephrologists Seem Informed and Up-to-Date About Health Care Patients Received Elsewhere Your center is on the right track compared to the national average. Patients were asked, "do your kidney doctors seem informed and up-to-date about the health care you received from other doctors?" The proportion of patients at ABC Dialysis Center who said "yes" was 1% higher compared to the national average and 14% lower compared to the average of the top 10% of dialysis centers.

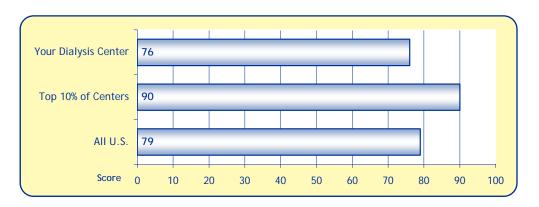


### **QUALITY OF DIALYSIS CENTER CARE AND OPERATIONS**

This section presents patient responses to 22 questions relating to the quality of dialysis center care and operations. It begins with an overall summary measure. The summary measure is an average of the responses to the individual questions. The individual questions are assembled into 3 sections: dialysis center staff's communication and caring, dialysis center staff's professionalism and competence, and dialysis center's operations. Dialysis center staff means nurses, technicians, dietitians, and social workers. Dialysis center staff does not include doctors. The responses to these individual questions are presented following the summary measure.

#### **Summary Measure**

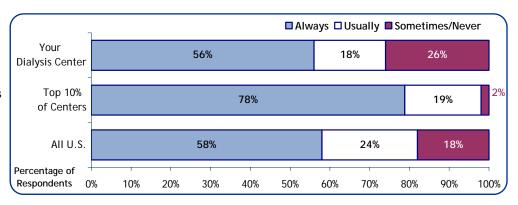
This summary measure is the combined score of patient responses to 22 questions. The questions relate to dialysis center staff communication and caring, dialysis center staff professionalism and competence, and dialysis center operations.



### Dialysis Center Staff's Communication and Caring

How Often Dialysis Center Staff Listened Carefully to Patients

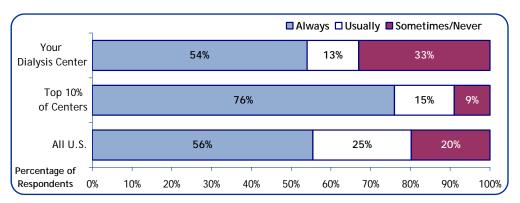
Your center is on the right track compared to the national average. Patients were asked, "how often did the dialysis center staff listen carefully to you?" The proportion of patients at ABC Dialysis Center who said "always" was 2% lower compared to the national average and 22% lower compared to the average of the top 10% of dialysis centers.

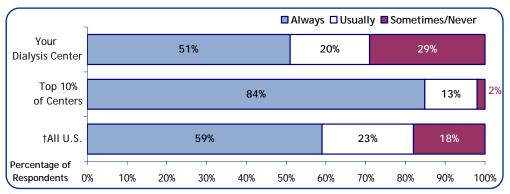


How Often Dialysis Center Staff Explained Things in a Way That Was Easy for Patients to Understand Your center is on the right track compared to the national average. Patients were asked, "how often did the dialysis center staff explain things in a way that was easy for you to understand?" The proportion of patients at ABC Dialysis Center who said "always" was 2% lower compared to the national average and 22% lower compared to the average of the top 10% of dialysis centers.

### How Often Dialysis Center Staff Showed Respect for What Patients Had to Say

Your center can improve compared to the national average. Patients were asked, "how often did the dialysis center staff show respect for what you had to say?" The proportion of patients at ABC Dialysis Center who said "always" was 8% lower compared to the national average and 33% lower compared to the average of the top 10% of dialysis centers.





<sup>&</sup>lt;sup>†</sup> = The national average for this score is significantly higher than your dialysis center's.

### How Often Dialysis Center Staff Spent Enough Time With Patients

Your center can improve compared to the national average. Patients were asked, "how often did the dialysis center staff spend enough time with you?" The proportion of patients at ABC Dialysis Center who said "always" was 8% lower compared to the national average and 30% lower compared to the average of the top 10% of dialysis centers.

### How Often Dialysis Center Staff Cared About Patients as People

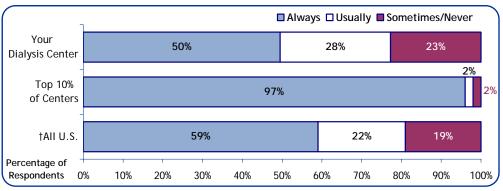
Your center can improve compared to the national average. Patients were asked, "how often did you feel that the dialysis center staff really cared about you as a person?" The proportion of patients at ABC Dialysis Center who said "always" was 9% lower compared to the national average and 47% lower compared to the average of the top 10% of dialysis centers.

### How Often Dialysis Center Staff Made Patients as Comfortable as Possible

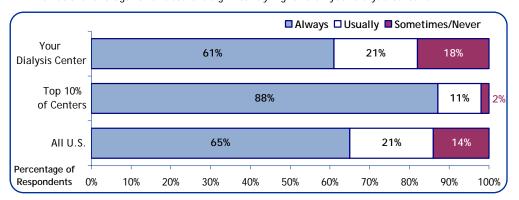
Your center is on the right track compared to the national average. Patients were asked, "how often did dialysis center staff make you as comfortable as possible?" The proportion of patients at ABC Dialysis Center who said "always" was 4% lower compared to the national average and 27% lower compared to the average of the top 10% of dialysis centers.



<sup>†</sup> = The national average for this score is significantly higher than your dialysis center's.

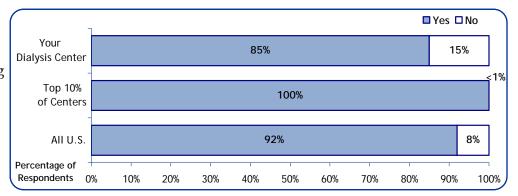


† = The national average for this score is significantly higher than your dialysis center's.



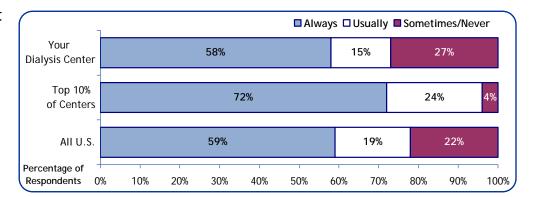
#### Whether Patients Felt Comfortable Asking Dialysis Center Staff Everything About Dialysis Care

Your center is on the right track compared to the national average. Patients were asked, "did you feel comfortable asking dialysis center staff everything you wanted to about dialysis care?" The proportion of patients at ABC Dialysis Center who said "yes" was 7% lower compared to the national average and 15% lower compared to the average of the top 10% of dialysis centers.



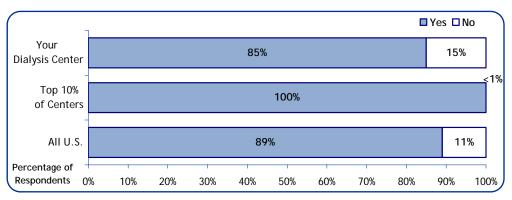
#### How Often Dialysis Center Staff Explained Blood Test Results to Patients in a Way That Was Easy to Understand

Your center is on the right track compared to the national average. Patients were asked, "how often did dialysis center staff explain blood test results in a way that was easy to understand?" The proportion of patients at ABC Dialysis Center who said "always" was 1% lower compared to the national average and 14% lower compared to the average of the top 10% of dialysis centers.

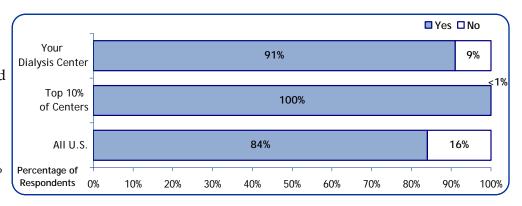


#### Whether Dialysis Center Staff Talked With Patients as Much as Patients Wanted About What They Should Eat and Drink

Your center is on the right track compared to the national average. Patients were asked, "did dialysis center staff talk to you as much as you wanted about what you should eat and drink?" The proportion of patients at ABC Dialysis Center who said "yes" was 4% lower compared to the national average and 15% lower compared to the average of the top 10% of dialysis centers.



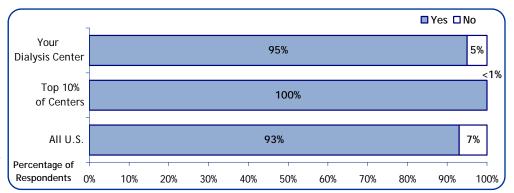
Whether Dialysis Center Staff Included Family Members or Friends as Much as Patients Wanted Your center is on the right track compared to the national average. Patients who had a family member or friend involved with their dialysis care were asked, "do dialysis center staff include your family member or friend as much as you wanted?" The proportion of patients at ABC Dialysis Center who said "yes" was 7% higher compared to the national average and 9% lower compared to the average of the top 10% of dialysis centers.



### Dialysis Center Staff's Professionalism and Competence

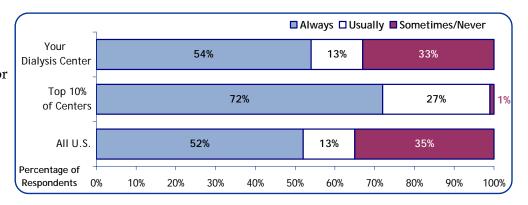
Whether Dialysis Center Staff Kept Patients' Information as Private as Possible From Other Patients

Your center is on the right track compared to the national average. Patients were asked, "did dialysis center staff keep information about you and your health as private as possible from other patients?" The proportion of patients at ABC Dialysis Center who said "yes" was 2% higher compared to the national average and 5% lower compared to the average of the top 10% of dialysis centers.



### How Often Dialysis Center Staff Covered Patients or Used a Curtain to Protect Patients' Privacy

Your center is on the right track compared to the national average. Patients who stated that they needed to be covered or use a curtain for privacy were asked, "how often did dialysis center staff cover you or use a curtain to protect your privacy?" The proportion of patients at ABC Dialysis Center who said "always" was 2% higher compared to the national average and 18% lower compared to the average of the top 10% of dialysis centers.



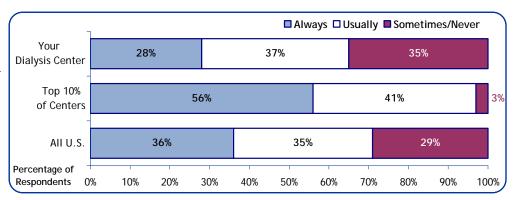
### How Often Dialysis Center Staff Inserted Needles as Painlessly as Possible

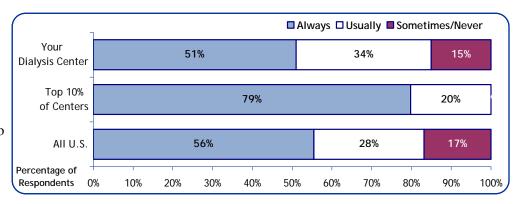
Your center is on the right track compared to the national average. Patients who have a graft or fistula were asked, "how often did dialysis center staff insert your needle with as little pain as possible?" Patients who inserted their own needles were asked to skip this question. The proportion of patients at ABC Dialysis Center who said "always" was 8% lower compared to the national average and 28% lower compared to the average of the top 10% of dialysis centers.

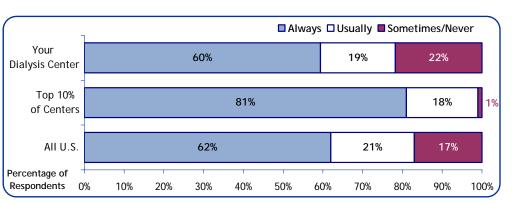
### How Often Dialysis Center Staff Checked Patients as Closely as They Wanted

Your center is on the right track compared to the national average. Patients were asked, "how often did dialysis center staff check you as closely as you wanted while you were on the dialysis machine?" The proportion of patients at ABC Dialysis Center who said "always" was 5% lower compared to the national average and 28% lower compared to the average of the top 10% of dialysis centers.

How Often Dialysis Center Staff Responded to Problems During Dialysis as Soon as Patients Wanted Your center is on the right track compared to the national average. Patients who reported having problems during dialysis were asked, "how often did dialysis center staff respond to these problems as soon as you wanted?" The proportion of patients at ABC Dialysis Center who said "always" was 2% lower compared to the national average and 21% lower compared to the average of the top 10% of dialysis centers.







### How Often Dialysis Center Staff Were Able to Manage Problems During Dialysis

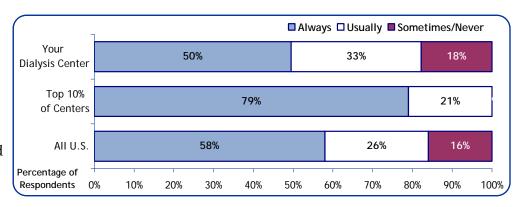
Your center is on the right track compared to the national average. Patients who reported having problems during dialysis were asked, "how often was the dialysis center staff able to manage problems during your dialysis?" The proportion of patients at ABC Dialysis Center who said "always" was 8% lower compared to the national average and 29% lower compared to the average of the top 10% of dialysis centers.

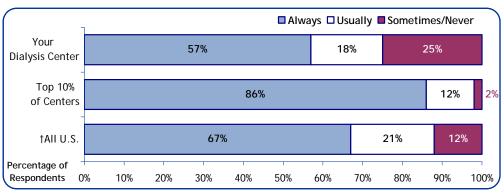
### How Often Dialysis Center Staff Behaved in a Professional Manner

Your center can improve compared to the national average. Patients were asked, "how often did dialysis center staff behave in a professional manner?" The proportion of patients at ABC Dialysis Center who said "always" was 10% lower compared to the national average and 29% lower compared to the average of the top 10% of dialysis centers.

#### How Often Dialysis Center Staff Changed Gloves Between Patients

Your center is performing well compared to the national average. Patients were asked, "how often did dialysis center staff change their gloves between patients?" The proportion of patients at ABC Dialysis Center who said "always" was 3% higher compared to the national average and 5% lower compared to the average of the top 10% of dialysis centers.





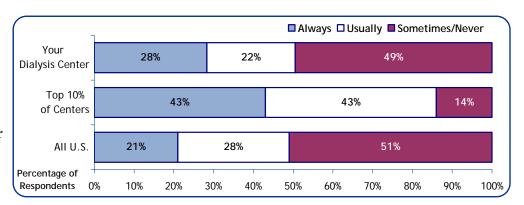
<sup>†</sup> = The national average for this score is significantly higher than your dialysis center's.



<sup>\* =</sup> The national average for this score is significantly lower than your dialysis center's.

### How Often Patients Were Satisfied With How Staff Handled Problems

Your center is on the right track compared to the national average. Patients who were unhappy with the care they received and who talked to staff about this were asked, "how often were you satisfied with the way that they handled these problems?" The proportion of patients at ABC Dialysis Center who said "always" was 7% higher compared to the national average and 15% lower compared to the average of the top 10% of dialysis centers.



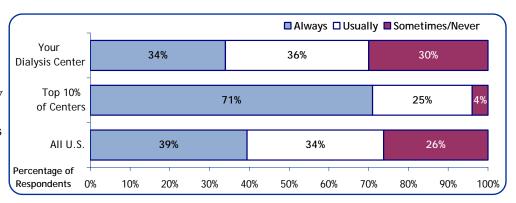
### **Dialysis Center's Operations**

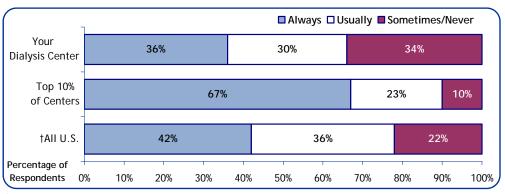
How Often Patients Were Connected to the Dialysis Machine Within 15 Minutes of Appointment or Shift Time

Your center is on the right track compared to the national average. Patients were asked, "when you arrived on time, how often were you put on the dialysis machine within 15 minutes of your appointment or shift time?" The proportion of patients at ABC Dialysis Center who said "always" was 5% lower compared to the national average and 37% lower compared to the average of the top 10% of dialysis centers.

### How Often the Dialysis Center Was as Calm and Quiet as It Could Be

Your center can improve compared to the national average. Patients were asked, "how often was the dialysis center as calm and quiet as it could be?" The proportion of patients at ABC Dialysis Center who said "always" was 6% lower compared to the national average and 31% lower compared to the average of the top 10% of dialysis centers.

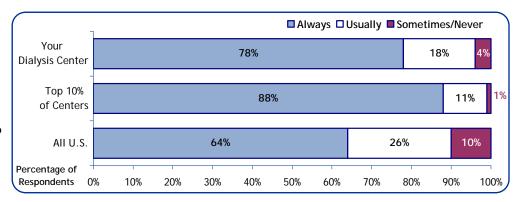




<sup>&</sup>lt;sup>†</sup> = The national average for this score is significantly higher than your dialysis center's.

### How Often the Dialysis Center Was as Clean as It Could Be

Your center is on the right track compared to the national average. Patients were asked, "how often was the dialysis center as clean as it could be?" The proportion of patients at ABC Dialysis Center who said "always" was 14% higher compared to the national average and 10% lower compared to the average of the top 10% of dialysis centers.



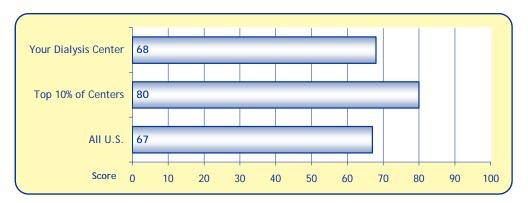
### PROVIDING INFORMATION TO PATIENTS



This section presents findings on providing information to patients. Questions related to all types of dialysis center staff, including, nurses, technicians, dietitians, social workers, and, in some cases, doctors. The summary measure is an average of the responses to the individual questions. The responses to these individual questions are presented following the summary measure.

#### **Summary Measure**

This summary measure is the combined score of patient responses to 11 questions. The questions relate to patients' knowledge about their condition and care, patient rights, and shared decision-making.



#### Whether Dialysis Center Staff Asked Patients About How Kidney Disease Affected Other Parts of Their Lives

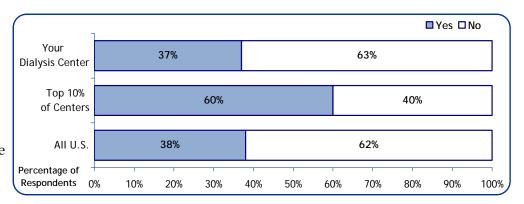
Your center is on the right track compared to the national average. Patients were asked, "has anyone on the dialysis center staff asked you about how your kidney disease affects other parts of your life?" The proportion of patients at ABC Dialysis Center who said "yes" was 1% lower compared to the national average and 23% lower compared to the average of the top 10% of dialysis centers.

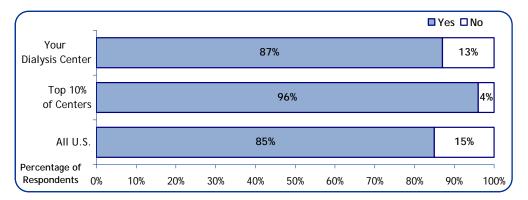
### Whether Patients Know How to Care for Graft, Fistula, or Catheter

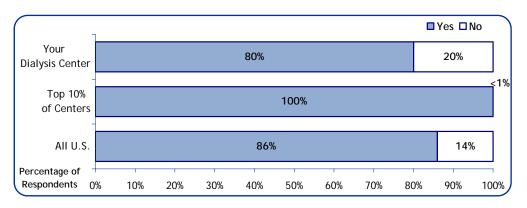
Your center is on the right track compared to the national average. Patients were asked, "do you know how to take care of your graft, fistula, or catheter?" The proportion of patients at ABC Dialysis Center who said "yes" was 2% higher compared to the national average and 9% lower compared to the average of the top 10% of dialysis centers.

### Whether the Dialysis Center Gave Patients Written Information About Their Rights

Your center is on the right track compared to the national average. Patients were asked, "did this dialysis center ever give you any written information about your rights as a patient?" The proportion of patients at ABC Dialysis Center who said "yes" was 6% lower compared to the national average and 20% lower compared to the average of the top 10% of dialysis centers.







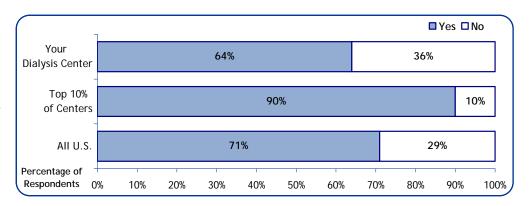
### Whether Dialysis Center Staff Reviewed Patients' Rights With Them

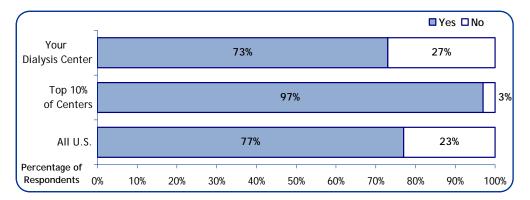
Your center is on the right track compared to the national average. Patients were asked, "did dialysis center staff at this center ever review your rights as a patient with you?" The proportion of patients at ABC Dialysis Center who said "yes" was 7% lower compared to the national average and 26% lower compared to the average of the top 10% of dialysis centers.

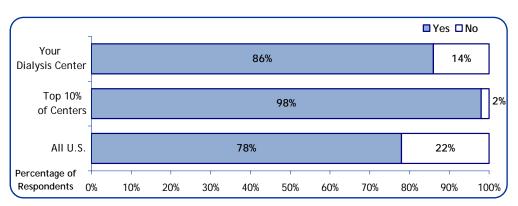
Whether Dialysis Center Staff Told Patients What to Do If They Experience a Health Problem at Home Your center is on the right track compared to the national average. Patients were asked, "has dialysis center staff ever told you what to do if you experience a health problem at home?" The proportion of patients at ABC Dialysis Center who said "yes" was 4% lower compared to the national average and 24% lower compared to the average of the top 10% of dialysis centers.

#### Whether Dialysis Center Staff Told Patients How to Disconnect From the Machines in Case of an Emergency

Your center is on the right track compared to the national average. Patients were asked, "has any dialysis center staff ever told you how to get off the machine if there is an emergency at the center?" The proportion of patients at ABC Dialysis Center who said "yes" was 8% higher compared to the national average and 12% lower compared to the average of the top 10% of dialysis centers.







Whether Nephrologists or Dialysis Center Staff Talked About Treatment Options as Much as Patients Wanted Your center is on the right track compared to the national average. Patients were asked, "did your kidney doctors or dialysis center staff talk to you as much as you wanted about

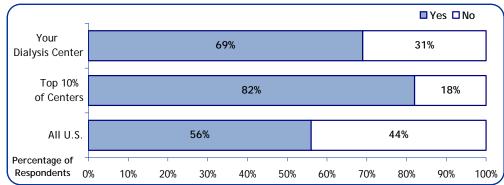
#### Top 10% 93% of Centers which treatment is right for you?" The proportion of patients at ABC Dialysis Center who said "yes" was 1% lower 74% All U.S. compared to the national average and 20% lower compared to the average of the top 10% of dialysis centers. Percentage of Respondents 0% 20% 10% 30% 40% 50% 60% 70% 80% Whether Nephrologists or Dialysis Center Staff

Your

Dialysis Center

Explained to Patients Why They Are Not Eligible for a **Kidney Transplant** 

Your center is on the right track compared to the national average. Patients who are not eligible for a kidney transplant were asked, "has a doctor or dialysis center staff ever explained to you why you are not eligible for a kidney transplant?" The proportion of patients at ABC Dialysis Center who said "yes" was 13% higher compared to the national average and 13% lower compared to the average of the top 10% of dialysis centers.



73%

■ Yes
■ No

7%

100%

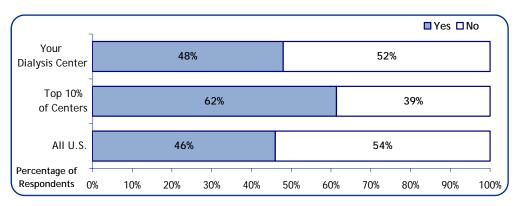
27%

26%

90%

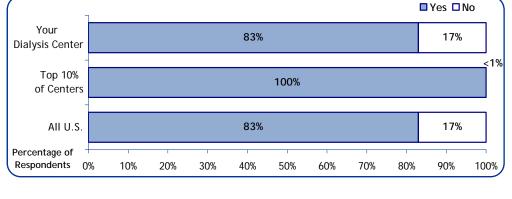
### Whether Nephrologists or Dialysis Center Staff Talked to Patients About Peritoneal Dialysis

**Your center is on the right track** compared to the national average. Patients were asked, "did either your kidney doctors or dialysis center staff talk to you about peritoneal dialysis?" The proportion of patients at ABC Dialysis Center who said "yes" was 2% higher compared to the national average and 14% lower compared to the average of the top 10% of dialysis centers.

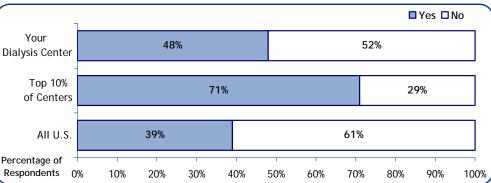


Whether Patients Were as Involved as They Wanted In Choosing Their Treatment

Your center is on the right track compared to the national average. Patients were asked, "were you involved as much as you wanted in choosing the treatment that is right for you?" The proportion of patients at ABC Dialysis Center who said "yes" was the same compared to the national average and 17% lower compared to the average of the top 10% of dialysis centers.



Whether Anyone at the Dialysis Center Gave Patients Information About How to Make a Complaint to Agencies That Check Dialysis Center Quality of Care Your center is on the right track compared to the national average. Medicare and each state have special agencies that check the quality of dialysis care at dialysis centers. Patients were asked, "has anyone at the dialysis center ever given you information about how to make a complaint to these agencies?" The proportion of patients at ABC Dialysis Center who said "yes" was 9% higher compared to the national average and 23% lower compared to the average of the top 10% of dialysis centers.



### **METHODS**



#### DEVELOPMENT OF THE SURVEY

This guide presents the results of a survey of patients receiving incenter hemodialysis. The survey asks about patients' experiences with the care they received at their dialysis center in the last 3 months and is part of the AHRQ's CAHPS family of products. The CAHPS In-Center Hemodialysis Survey was developed using information from interviews with administrators and network executives; feedback from an advisory panel of nephrologists, nurses, and social workers who work in the field of dialysis care; focus groups with patients and their families; focus groups with nephrologists; and a review of the literature. Both Englishlanguage and Spanish-language versions of the survey were tested with patients to ensure that the questions and response choices were understood as intended and easy to answer.

The CAHPS In-Center Hemodialysis Survey was designed to move beyond satisfaction scores, which are partly a function of expectations, to assessments based on reports of patient experiences of specific aspects of dialysis care. The survey questionnaire is included in appendix A.

#### **Types of Questions**

There are 3 questions that ask patients to rate the dialysis staff, their kidney doctors, and the dialysis center on a 0 to 10 scale, where 0 is the "worst possible" and 10 is the "best possible." There are 40 questions that ask patients to report how often certain things happen ("always," "usually," "sometimes," "never") or whether they happened or not ("yes," "no"). The topics that patients are asked to report on refer to: the

communication and caring of nephrologists with patients, the quality of dialysis center care and its operations, and the questions related to patient empowerment. To simplify the presentation of the results from these questions, the CAHPS Consortium created 3 summary measures.

To calculate the mean score for each summary measure, the means for each of the questions included in the summary measure were added up and divided by the number of questions included.

#### **COLLECTION OF SURVEY DATA**

The CAHPS In-Center Hemodialysis Survey data for this initial version were collected from January through April 2005 from 1,454 patients at 32 dialysis centers nationwide. The dialysis centers included in the sample were selected to ensure a diverse representation by region of the country, size of the dialysis center, and type of financing (for-profit, hospital-based, and not-for-profit). To be eligible for the survey, patients had to be at least 18 years old and on dialysis for at least 3 months at that specific dialysis center.

#### Sampling Method

A random sample of dialysis patients was selected, and patients were randomly assigned to either the telephone-only mode or to the mail with telephone follow-up mode (also called "mixed mode"). Patients randomized to respond to the survey by telephone were sent an advance notification letter and were then contacted by phone and asked to respond to the survey as an interviewer read the questions. Potential respondents were

contacted at least 10 times and if no contact was possible, they were excluded from the sample.

Patients randomized to respond to the survey by mail (with telephone follow-up, if they did not respond by mail) were sent an advance notification letter followed by a copy of the survey and a cover letter approximately 2 weeks later. Patients were also sent a reminder letter approximately 2 weeks after they were mailed a survey. If the patient did not return the completed survey, he was mailed a second copy of the survey with a cover letter approximately 2 weeks after the reminder letter. Finally, if the patient did not return the second mailed survey, he was contacted and asked to respond to the survey by phone approximately 2 weeks after the second survey was mailed.

Hispanic or Latino patients in the sample received both an English and a Spanish version of the advance notification letter and the survey. All of the advance notification letters in English included a note in Spanish letting respondents know that if they preferred to complete the survey in Spanish, they could call a toll-free number to request a copy. A total of 3,143 hemodialysis patients were selected to participate in the study. Of these, 1,781 (57%) were randomized to respond by telephone and 1,362 (43%) were randomized to respond by mail with telephone follow-up, if needed.

#### CHARACTERISTICS OF SURVEY RESPONDENTS

Out of the 2,987 patients initially selected to participate in the survey, 1,454 actually responded (a 49% response rate). Among patients randomized to respond to the survey by telephone, 695 (39%) completed the survey. Among patients randomized to the mail with telephone follow-up mode, 759 (56%) completed the survey. At one of the dialysis centers, only 3 patients responded to the survey; therefore, this center was excluded from the analysis.

The analyses were carried out on 1,451 patient responses to the survey at the other 31 centers.

Tables 1 and 2 present the characteristics of survey respondents at your dialysis center as compared to those for the whole analytic sample of respondents at 31 centers. Table 1 focuses on demographic and related characteristics and Table 2 focuses on health care characteristics. Participants at your dialysis center were mostly similar in age to patients at the other centers, except that the proportion of 34- to 54-year-olds was smaller and the proportion of respondents 75 and older was larger at your center. The proportion of male respondents was larger at your dialysis center than at the other centers. The education levels of respondents at your dialysis center were somewhat different than the rest of the centers: your center had larger proportions of patients with some high school or some college. It had smaller proportions of respondents with a high school degree or more than a four-year degree. Your dialysis center had larger proportions of Hispanic/Latino respondents, white respondents and American Indian/Alaskan Native respondents compared to the rest of the centers and a smaller proportion of black or African American respondents.

Table 1. Demographic Characteristics of Respondents

	ABC Dialysis Center Number	All Centers
Respondent Characteristics	(%)	Number (%)
Age		
18 to 24	0 (0.0%)	9 (0.6%)
25 to 34	2 (3.2%)	50 (3.5%)
35 to 44	8 (12.9%)	110 (7.6%)
45 to 54	12 (19.4%)	234 (16.1%)
55 to 64	14 (22.6%)	352 (24.3%)
65 to 74	17 (27.4%)	369 (25.5%)
75 or older	9 (14.5%)	323 (22.3%)

Table 1. Demographic Characteristics of Respondents (cont'd)

	ABC Dialysis Center	All Centers
Respondent Characteristics	Number (%)	Number (%)
Gender		
Male	36 (58.1%)	738 (51.1%)
Female	26 (41.9%)	706 (48.9%)
Highest grade completed		
8th grade or less	7 (11.5%)	197 (13.7%)
Some high school but did not graduate	15 (24.6%)	283 (19.7%)
High school graduate or GED	14 (23.0%)	487 (33.8%)
Some college or 2-year degree	20 (32.8%)	318 (22.1%)
4-year college graduate	4 (6.6%)	67 (4.7%)
More than 4-year college degree	1 (1.6%)	88 (6.1%)
Hispanic or Latino origin or descent		
Yes	12 (26.7%)	190 (13.8%)
No	33 (73.3%)	1187 (86.2%)
Race (may mark more than one)		
American Indian or Alaska Native	6 (11.3%)	91 (6.7%)
Asian	2 (3.8%)	59 (4.4%)
Black or African American	17 (32.1%)	595 (43.9%)
Native Hawaiian or Other Pacific Islander	0 (0.0%)	21 (1.6%)
White	34 (64.2%)	719 (53.1%)
Language spoken at home		
English	56 (90.3%)	1258 (87.9%)
Spanish	3 (4.8%)	86 (6.0%)
Both English and Spanish equally	3 (4.8%)	56 (3.9%)
Some other language	0 (0.0%)	31 (2.2%)
Survey Mode		
Mail	22 (35.5%)	636 (43.8%)
Phone	40 (64.5%)	815 (56.2%)

Self-reports for overall health and overall mental or emotional health were similar for your dialysis center and the rest of the centers. A smaller proportion of patients at your dialysis center are being treated for high blood pressure, diabetes, and/or heart disease compared with the entire sample.

Table 2. Health Characteristics of Respondents

Respondent	ABC Dialysis Center	All Centers
Characteristics	Number (%)	Number (%)
Self-reported overall		
health		
Excellent	5 (8.1%)	79 (5.5%)
Very good	8 (12.9%)	227 (15.7%)
Good	22 (35.5%)	491 (34.1%)
Fair	21 (33.9%)	519 (36%)
Poor	6 (9.7%)	126 (8.7%)
Self-reported overall		
mental or emotional		
health		
Excellent	13 (21.3%)	263 (18.3%)
Very good	14 (23.0%)	368 (25.6%)
Good	20 (32.8%)	493 (34.3%)
Fair	10 (16.4%)	256 (17.8%)
Poor	4 (6.6%)	59 (4.1%)
Is being treated for high blood pressure		
Yes	39 (62.9%)	1154 (80.2%)
No	23 (37.1%)	285 (19.8%)
Is being treated for diabetes		
Yes	27 (43.6%)	753 (52.3%)
No	35 (56.5%)	688 (47.7%)
Is being treated for heart disease		
Yes	23 (37.1%)	588 (41.0%)
No	39 (62.9%)	845 (59.6%)

#### **ANALYSIS OF SURVEY RESPONSES**

#### **Number of Dialysis Centers and Respondents**

Although 32 dialysis centers were included in the original sample, there was one center that only had 3 patients respond to the survey; therefore, results for this center were excluded from the analysis. The sample for the analysis (the analytic sample) included 31 dialysis centers and responses from 1,451 patients. Because of rounding, percentages will sometimes not add up exactly to 100%.

#### **Comparison Data**

The report includes comparison data that can be used for quality improvement; namely, the results for the national sample and the results for the dialysis centers who were among the top 10% for that particular measure or question.

The results for the national sample were calculated based on the responses to the survey across all 31 centers included in the analytic sample and represent either the summed average or the average proportion of respondents in a particular response category (for example, the average for all centers or the mean proportion who responded "always" to a question) The results for the top 10% performing centers were calculated across responses to the survey for the 3 centers with the highest results. We used 3 centers to define the top 10% because 3 centers out of the 31 in the analytic sample is approximately 10%.

#### Testing for the Statistical Significance of Differences

In this guide, we tested the statistical significance of the difference between your center's results and the national results as well as your center's results and the results for the top 3 centers (for that question or summary measure) using a 0.05 level of significance. If a difference is statistically significant, we would expect to see this large of a difference by chance less than 5 out of 100 times.

#### Interpretation of Results

For each summary measure, rating, and individual question, we provided guidance to dialysis centers on the potential interpretation of the results using 1 of 3 statements:

- "Your center is performing well compared to the national average," meaning, your results are higher than those for the whole sample of 31 centers and the difference is statistically significant.
- "Your center can improve compared to the national average," meaning, your results are lower than those for the whole sample of 31 centers and the difference is statistically significant.
- "Your center is on the right track compared to the national average," meaning, your results are not significantly lower or significantly higher than those for the whole sample of 31 centers.

#### Case Mix Adjustment

To fairly compare your dialysis center results to those of other centers, we adjusted the results for differences in respondent characteristics across centers. These are characteristics that could change the way a patient responds to the survey regardless of their care experience; in this case: patients' age, education, and self-reported health. For example, individuals in better health and older individuals have tended to rate their care and the setting in which they receive their care higher than individuals who are younger and in poorer health. The adjusted results are those we would expect for each center, if they had similar patients. For this report, the results were case-mix adjusted by respondents' age, education, and overall health status following standard CAHPS methods that have been subject to rigorous development and testing.

If you have questions about your results, please contact your corresponding CMS Network office.

For more information on AHRQ's CAHPS family of products, please go to www.cahps-sun.org. On this site, you can learn about the CAHPS program, including survey instrument development, using survey results for quality improvement, and reporting results.